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IMPORTANT
For your own safety, before assembling and operating this unit, read this Operator's Manual carefully and completely. Learn the operation, applications and potential hazards peculiar to this unit.

## DESCRIPTION AND SPECIFICATIONS

**Description**
The RIDGID No. 700 Portable Electric Threader is an electric motor driven, heavy-duty unit which provides power to thread pipe using RIDGID 12-R drop head die heads.

## SPECIFICATIONS/TECHNICAL INFORMATION

Threading Capacity (Pipe & Conduit): ---------- 1/8" - 2"
Gear Head/Type: ---------- spur
Length: ---------- 720 mm
Weight: ---------- 14 kg
Motor, Universal Type (115 or 230 V): ---------- 1100 W.
Support Arm Model: ---------- 775
Die Head Model: ---------- 12-R

**Standard Equipment**
See RIDGID Catalogue

**Safety**
1. Know your Power Drive. Read the Operator's Manual carefully. Learn the operation, application, and limitations as well as the specific potential hazards peculiar to this tool.
2. Use right tool. We recommend use of 775 Support Arm. The Support Arm assures safer operation when using the 700 Power Drive horizontally, vertically or overhead because once it is secured to the pipe to take up the threading torque, both hands are free to mount the Power Drive into position. When the job is completed, the Power Drive and Support Arm can be removed separately assuring safer job take down. Do not force small tool or attachment to do the job of a heavy-duty tool.
3. Secure work. Use clamp, bench vise or stand vise to hold pipe which is not otherwise rigidly supported or attached.

**Operation**
**Threading with drop head die heads.**
1. 1/8" - 2" RIDGID 12-R Die Heads fit into the RIDGID 700 power threader without the need for adaptors. Simply push Die Heads spline end first, squarely into Face Gear until spring catches securely. (See fig. 1).
   Check that pawl is fully engaged by rotating diehead by hand.
   For right hands threads, installation is as shown in fig. 2a.
   For left hand threads, installation is as shown in fig 2b.
   Note: The direction change switch is used to back-off the Die Head when the thread is completed. See fig. 2c.
   **Important:** When threading pipe, the No. 775 Support Arm should be used and securely locked on the pipe as shown in Figures 3 and 4. To use the Support Arm and Power Drive together correctly refer to Figures 3 and 4. Failure to follow these instructions could result in injury to operator because of torque developed during threading.
2. Place Die Head (already installed in Power Drive) over end of pipe. When using make sure Power Drive is correctly positioned on Support Arm. For Right Hand threads, Die Head should rotate CW. (looking at face of Die Head).
   Note: During threading, apply plenty of RIDGID Thread Cutting Oil to dies.
3. Simultaneously actuate switch button and exert pressure on machine to make sure thread is started. Keep switch button depressed until threading is completed. Releasing switch button will stop the Power Drive.
   **Caution:** Hold onto Power Drive handle firmly to resist initial torque while backing off Die Head.
4. To back off Die head from threaded pipe, set direction switch to back off position. See fig. 2d. Actuate paddle switch. When dies clear end of pipe, grip handle on top of Power Drive and remove Power Drive from pipe.

## MAINTENANCE OF POWER DRIVE

**Motor Brush Replacement**
**Warning:** To reduce possibility of electrical shock and accidental starting always unplug power cord before servicing. Check Motor Brushes every 6 months and replace Brushes when they are worn to less than 1/4" (6 mm).
The unit is designed to be maintenance free apart from the motor brushes which will wear. All other maintenance should be performed by factory approved service stations. Permanent oil filling - no maintenance required.

## TROUBLE SHOOTING

**Warning**
Each remedy with ⚠ has to be repaired by a qualified electrical craftsman. Disconnect power cord.

| Trouble shooting | Possible cause | Remedy |
|---|---|---|
| - motor does not start | - interruption of supply<br>- fuse has been blown<br>- brushes do not touch armature | - examine the supply ⚠<br>- install a new fuse<br>- check the brushes, renew used brushes ⚠ |
| - motor cannot be loaded | - short circuit<br>- overload because of dull dies<br>- bad quality or insufficient thread cutting oil | - look for the short circuit and resolve ⚠<br>- renew the dies<br>- use RIDGID thread cutting oil in adequate quantity |
| - abnormal heating of the motor | - overload because of dull dies<br>- insufficient cooling air | - renew dies<br>- clean the air-vent opening of the motor |
| - sparks forming at the motor | - dirty commutator<br>- bad contact between brushes and brush holder<br>- because of excessive wear brushes do not touch commutator properly<br>- brushes of different manufacture<br>- sharp edge of brush | - please send in for repair ⚠<br>- tighten the screws, make sure brush is pressed firmly onto commutator<br>- change worn brushes ⚠ (replace only with genuine RIDGID brushes)<br>- only use original brushes ⚠<br>- break edge ⚠ |
| - "sparks" in the motor compartment | - particles come loose from brushes or armature (collector) and start glowing | - send machine in for repair ⚠ |
| - die head does not start threading | - dull or broken dies<br>- machine running in wrong direction | - change dies<br>- check setting of the direction switch |
| - damaged thread | - dull dies<br>- dies not assembled in correct sequence<br>- low quality pipe<br>- bad quality or insufficient thread cutting oil | - change dies<br>- put dies in correct sequence<br>- make sure only pipe of good quality is used<br>- use only RIDGID thread cutting oil in adequate quantity |
| - support arm turns while threading | - support arm jaws dirty | - clean with wire brush |
| - die heads cannot be changed properly | - burr has occurred at the spline end of the die head | - eliminate burr with file |
| - die head not held tightly | - retaining spring damaged or worn | - replace retaining spring |

Fig. 1

Fig. 1b

Fig. 2a

Fig. 2b

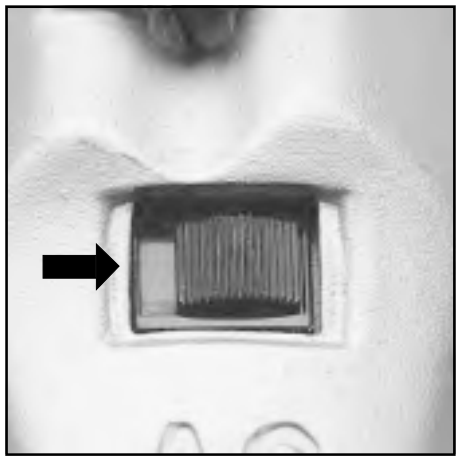
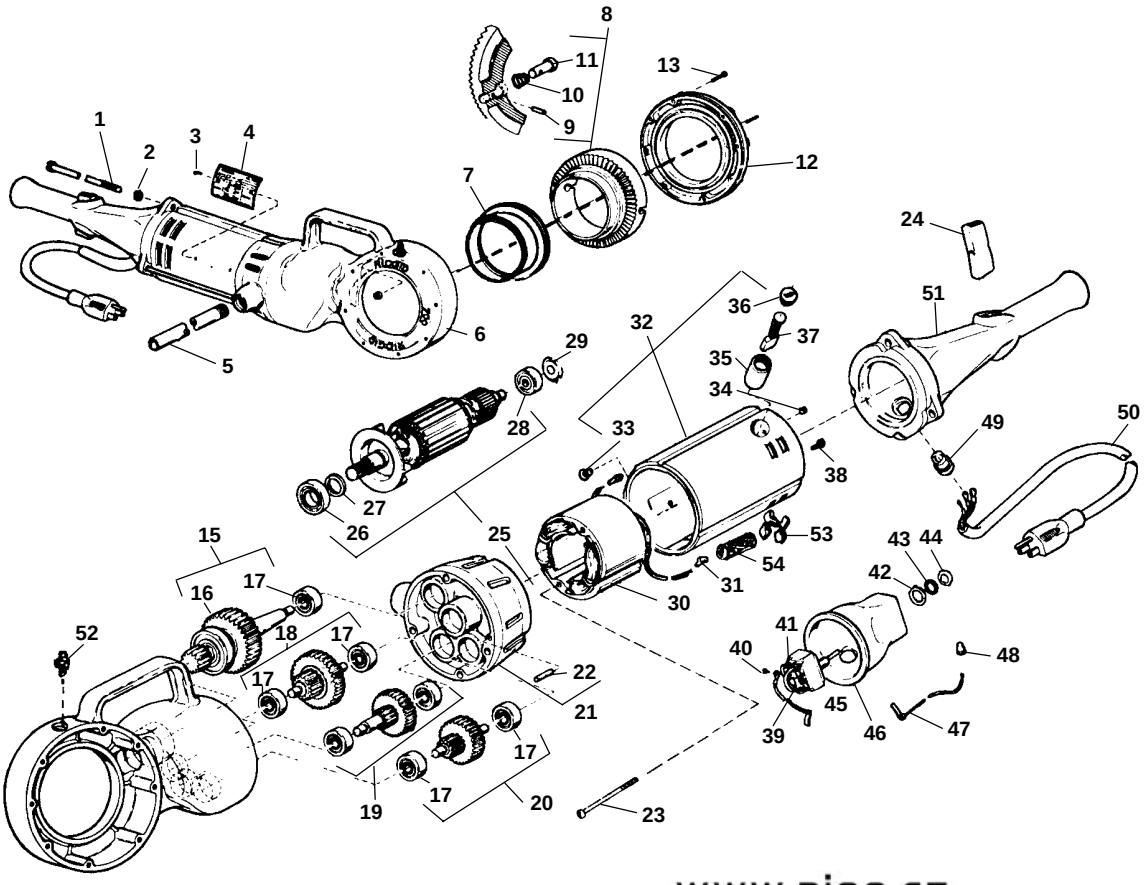


Fig. 2c

Fig. 3

Fig. 4

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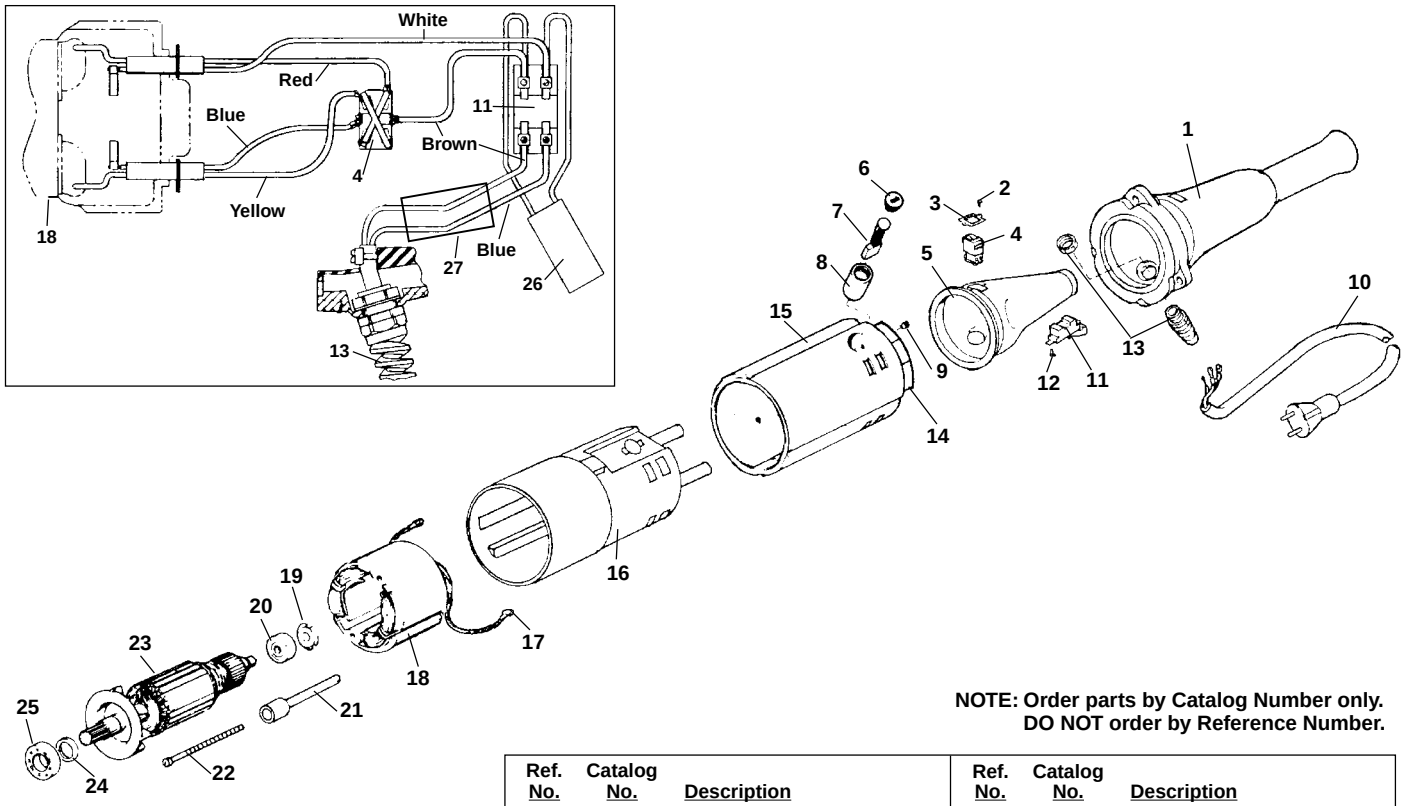
**NOTE: Order parts by Catalog Number only.**
**DO NOT order by Reference Number.**

| Ref. No. | Catalog No. | Description | |
|---|---|---|---|
| 1 | 44785 | E-1893 | Tie Bolt (4) |
| 2 | 40770 | E-1719 | Lock Washer (4) |
| 3 | 85920 | E-10006 | Pop Rivet (2) |
| 4 | | | Name Plate (115V) |
| | | | Name Plate (230V) |
| 5 | 46615 | E-833 | Torque Arm |
| 6 | 42970 | B-190-X | Gear Case Assembly (Includes Ref. 7, 13, 14, 52) |
| 7 | 44060 | D-751 | Bearing |
| 8 | 43395 | C-375-X | Face Gear Assembly |
| 9 | 32475 | E-6085 | Spring Pin (2) |
| 10 | 44915 | E-1967 | Spring (2) |
| 11 | 44910 | E-1966 | Adapter Pawl (2) |
| 12 | 43345 | C-306 | Cover |
| 13 | 46775 | E-897 | Screw (8) |
| 14 | 83890 | E-2870 | Lock Nut (8) |
| 15 | 44900 | E-1960-X | 4th Gear Assembly |
| 16 | 45315 | E-3215 | Bearing |
| 17 | 45060 | E-2630 | Bearing (7) |
| 18 | 44830 | E-1903-X | 3rd Gear Assembly |
| 19 | 44820 | E-1901-X | 1st Gear Assembly |
| 20 | 44825 | E-1902-X | 2nd Gear Assembly |
| 21 | 43335 | C-305-X | Fan Housing Assembly |
| 22 | 45165 | E-2893 | Dowel Pin |
| 23 | 44555 | E-1495 | Field Mtg. Screw (2) |
| 24 | 97260 | E-10649 | Switch Button |
| 25 | 44055 | D-750-X | Armature & Fan Assy. (115V) |
| | 44075 | D-758-X | Armature & Fan Assy. (230V) |
| 26 | 44565 | E-1497 | Bearing |
| 27 | 44430 | E-1340 | Retaining Ring |

| Ref. No. | Catalog No. | Description | |
|---|---|---|---|
| 28 | 44760 | E-1880 | Bearing |
| 29 | 44790 | E-1894 | Load Spring |
| 30 | 44070 | D-755 | Field (115V) (Incl. Ref. No. 31) |
| | 28922 | D-2364 | Field (230V) (Incl. Ref. No. 31) |
| 31 | 83895 | E-1068 | Ring Tongue Terminal (2) |
| 32 | 42975 | B-191-X | Motor Housing Assembly |
| 33 | 44765 | E-1882 | Lock Screw |
| 34 | 39770 | E-3145 | Set Screw (2) |
| 35 | 44795 | E-1895 | Brush Holder (2) |
| 36 | 45660 | E-4404 | Brush Cap (2) |
| 37 | 44815 | E-1900-X | Brush Assembly (2) |
| 38 | 45420 | E-3467 | Ground Screw |
| 39 | 44905 | E-1964 | Switch |
| 40 | 46310 | E-5367 | Screw (5) |
| 41 | 44890 | E-1957 | Jumper (2) |
| 42 | 75700 | E-1953 | Lock Ring |
| 43 | 75695 | E-1961 | Lock Washer (Internal Tooth) |
| 44 | 46590 | E-799 | Lock Nut |
| 45 | 44880 | E-1954 | Brush Lead (Blue) |
| 46 | 43390 | C-370 | Switch Insulator |
| 47 | 44885 | E-1956 | Brush Lead (White) |
| 48 | 44635 | E-1517 | Wire Nut |
| 49 | 46730 | E-889 | Cord Retainer |
| 50 | 89155 | D-1298 | Service Cord (115V) |
| | 44045 | D-747 | Service Cord (230V) |
| 51 | 97255 | | Handle |
| 52 | 46860 | E-912 | Grease Fitting |
| 53 | 41270 | | "X" Washer |
| 54 | 44755 | | Insulator Tube |
| 55 | 41620 | | Grease |

## No. 700 Power Drive-w/Dual Switch (Europe only)

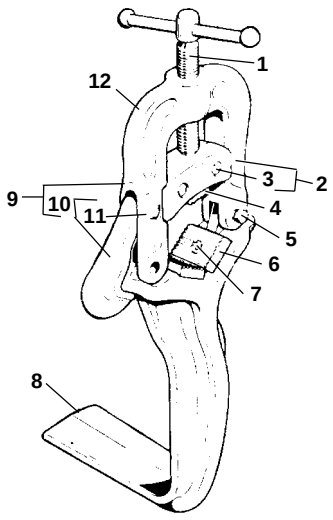



**NOTE: Order parts by Catalog Number only. DO NOT order by Reference Number.**

| Ref. No. | Catalog No. | Description |
|---|---|---|
| 1 | 32116 | Handle |
| 2 | 32176 | Screw |
| 3 | 32166 | Clip |
| 4 | 32126 | Reversing Switch |
| 5 | 32106 | Switch Liner |
| 6 | 30906 | Brush Cap |
| 7 | 44815 | Brush Assembly |
| 8 | 30916 | Brush Holder |
| 9 | 39770 | Set Screw (2) |
| 10 | 18666 | Line Cord (Eur. Di.) |
| | 32236 | Line Cord 48 Volt |
| 11 | 32136 | ON/OFF Switch |
| 12 | 32156 | Screw |
| 13 | 66537 | Strain Relief (48 Volt) |
| | 32246 | Strain Relief w/Cable Sleeve |
| 14 | 32096 | Insulating Cap |
| 15 | 18676 | Motor Housing |
| 16 | 18506 | Sleeve f/Field |
| 17 | 12456 | Terminal (2) |
| 18 | 18606 | Field |
| | 32306 | Field 48 Volts |
| 19 | 44790 | Load Spring |
| 20 | 44760 | Bearing |
| 21 | 18566 | Sleeve f/Screw |
| 22 | 18486 | Field Mounting Screw (2) |
| 23 | 18596 | Armature and Fan Assembly (Eur. Di.) |
| | 32316 | Armature and Fan Assembly |
| 24 | 44430 | Retaining Ring |
| 25 | 44565 | Bearing |
| 26 | 18406 | Suppressor |
| 27 | 63377 | Ferrite Bead |

**Service Note:**
For service parts used in early style machines, refer to the model 700 with a single control switch.

## No. 775 Support Arm




| Ref. No. | Catalog No. | Description |
|---|---|---|
| 1 | 40355 | Feed Screw |
| 2 | 40360 | Jaw Clamp (Incl. Ref. No. 3) |
| 3 | 40345 | Screw and Washer (2) |
| 4 | 40335 | Upper Jaw |
| 5 | 40325 | Hinge Bolt, Washer and Nut |
| 6 | 32100 | Lower Jaws (1 set) (2 per set) |
| 7 | 32205 | Lower Jaw Screw (2) |
| 8 | 42945 | Base |
| 9 | 40310 | Yoke and Hook Assembly (Incl. Ref. No. 10) |
| 10 | 40320 | Hook (Incl. Ref. No. 11) |
| 11 | 40340 | Hinge Pin |
| 12 | 40315 | Yoke Assembly Complete (Incl. Ref. Nos. 1, 2, 4, 5 & 9) |